Claims 1-17 (cancelled herewith)

18.(new) An image processing method comprising the steps of:

defining a pixel of interest in an object;

defining a plurality of local regions, each of said local regions comprising a plurality of pixels disposed in a line;

defining a mode of each of said plurality of local regions, said mode being an angular disposition of said line;

selecting one of said plurality of local regions;

calculating variance (S) of pixel values of said pixel of interest of the selected one of said plurality of local regions;

comparing the calculated value of variance (S) with a desired value of variance (Sn), and

when the value of variance (S) is less than the desired value of variance (Sn), calculating an average pixel value (Pm); and

producing an image using said average pixel value (Pm).

19.(new) The method of claim 18, further comprising the steps of:

when the value of variance (S) is not less than the desired value of variance (Sn), determining whether all local regions are finished with processing; and

when all local regions are finished, selecting a local region having a minimum value of variance (S); and

calculating an average pixel value (Pm).

20.(new) The method of claim.18, further comprising the steps of:

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when the value of variance (S) is not less than the desired value of variance (Sn), determining whether all local regions are finished with processing; and

when all local regions are not finished, changing the local region.

21(new). The method of claim 18, further comprising the steps of:

determining whether all pixels of interest are finished with processing; and

when all pixels of interest are not finished with processing, changing the pixel of interest.

22.(new) An image processing apparatus comprising:

means for defining a pixel of interest in an object;

means for defining a plurality of local regions, each of said local regions comprising a plurality of pixels disposed in a line;

means for defining a mode of each of said plurality of local regions, said mode being an angular disposition of said line;

means for selecting one of said plurality of local regions;

means for calculating variance (S) of pixel values of said pixel of interest of the selected one of said plurality of local regions;

means for comparing the calculated value of variance (S) with a desired value of variance (Sn);

means for calculating an average pixel value (Pm) when the value of variance (S) is less than the desired value of variance

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(Sn); and

means for producing an image using said average pixel value (Pm).

23.(new) The apparatus of claim 22, further comprising:

means for determining whether all local regions are finished with processing, when the value of variance (S) is not less than the desired value of variance (Sn):

means for selecting a local region having a minimum value of variance (S), when all local regions are finished with processing; and

means for calculating an average pixel value (Pm).

24.(new) The apparatus of claim 22, further comprising:

means for determining whether all local regions are finished with processing, when the values of variance (S) is not less than the desired value of variance (Sn); and

means for changing the local region, when all local regions are not finished with processing.

25.(new) The apparatus of claim 22, further comprising:

means for determining whether all pixels of interests are finished with processing; and

means for changing the pixel of interest when all pixels of interest are not finished with processing.

26.(new) A recording medium which records in a computer-readable manner a program for a computer to perform the functions of:

defining a pixel of interest in an object;

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defining a plurality of local regions, each of said local regions comprising a plurality of pixels disposed in a line;

defining a mode of each of said plurality of local regions, said mode being an angular disposition of said line;

selecting one of said plurality of local regions;

calculating variance (S) of pixel values of said pixel of interest of the selected one of said plurality of local regions;

comparing the calculated value of variance (S) with a desired value of variance (Sn), and

when the value of variance (S) is less than the desired value of variance (Sn), calculating an average pixel value (Pm); and

producing an image using said average pixel value (Pm).

27.(new) The recording medium of claim 26, comprising the further functions of:

when the value of variance (S) is not less than the desired value of variance (Sn), determining whether all local regions are finished with processing; and

when all local regions are finished, selecting a local region having a minimum value of variance (S); and

calculating an average pixel value (Pm).

28.(new) The recording medium of claim 26, comprising the further functions of:

when the value of variance (S) is not less than the desired value of variance (Sn), determining whether all local regions are finished with processing; and

when all local regions are not finished, changing the local

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region.

29.(new) The recording medium of claim 26, comprising the further functions of:

determining whether all pixels of interest are finished with processing; and

when all pixels of interest are not finished with processing, changing the pixel of interest.

30.(new) An imaging apparatus comprising:

means for collecting a signal from an object;

means for producing an original image based on said collected signal;

means for defining a pixel of interest in said object;

means for defining a plurality of local regions, each of said local regions comprising a plurality of pixels disposed in a line;

means for defining a mode of each of said plurality of local regiois, said mode being an angular disposition of said line;

means for selecting one of said plurality of local regions;

means for calculating variance (S) of pixel values of said pixel of interest of the selected one of said plurality of local regions;

means for comparing the calculated value of variance (S) with a desired value of variance (Sn);

means for calculating an average pixel value (Pm) when the value of variance (S) is less than the desired value of variance (Sn); and

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means for producing an image using said average pixel value (Pm).

31.(new) The apparatus of claim 30, further comprising:

means for determining whether all local regions are finished with processing, when the value of variance (S) is not less than the desired value of variance (Sn);

means for selecting a local region having a minimum value of variance (S), when all local regions are finished with processing; and

means for calculating an average pixel value (Pm).

32.(new) The apparatus of claim 30, further comprising:

means for determining whether all local regions are finished with processing, when the value of variance (S) is not less than the desired value of variance (Sn); and

means for changing the local region, when all local regions are not finished with processing.

33.(new) The apparatus of claim 30, further comprising:

means for determining whether all pixels of interests are finished with processing; and

means for changing the pixel of interest when all pixels of interest are not finished with processing.

34.(new) The apparatus of claim 30, wherein said signal is a magnetic resonance signal.

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